Author Index of Volume 248

Abd El-Hady, S. A., 224
Afifi, H. H., 253
Ajayi, O. B., 57
Allen, L. H., 257
Als-Nielsen, J., 95
Ashour, A., 253

Barthou, C., 193
Belkind, A., 163
Belohradsky, M., 78
Benalloul, P., 193
Benoit, J., 193
Bensahel, D., 1
Berardo, M., 12
Berge, B., 47, 95
Bhosale, C. H., 137
Bizzotto, D., 69
Blanpain, B., 257
Bolotov, V. V., 212
Boucaud, P., 1

Cailler, M., 204
Chao, B. S., 156
Charai, A., 12
Chen, C.-F., 149
Chen, S.-H., 149
Chevigny, E., 95
Chiou, B.-S., 247
Collins, R. A., 166
Crousier, J., 51
Crousier, J.-P., 51

Dauchot, J. P., 220
Devillers, M. A. C., 110
Dugnoille, B., 220

Efremov, M. D., 212
Eftekhari, G., 199
El-Hagary, M. A., 224
Eltoukhy, A., 41
Emelyanov, V. A., 28
Ermolov, S. N., 145

Fan, Y., 83, 100
Ferrieu, F., 1
Fominski, V. Yu., 240
Franz, H., 184

Gao, M., 106
Gastaldi, J., 12
Gas'kov, A. M., 6
Gautheron, B., 6
Giorgio, S., 12
Glebovsky, V. G., 145
Glowacki, F., 1
Gould, R. D., 263
Gravano, S., 263
Grübel, G., 95
Gutekunst, G., 18
Gutsche, M., 18

Hating, J. G., 110
Hanane, Z., 51
Hecq, M., 220
Heller, L. M., 140
Henderson, R. H., 32
Hong, T.-M., 149
Hulse, J. E., 140

Itadera, K., 92

Jeynes, C., 57
Jiaa, C. L., 41
Jiang, D., 83
Jiang, Y.-S., 36
Jin, D., 118
Jochum, J., 18
Jurusik, J., 178

Kemmather, B., 18
Kolosova, E. V., 145
Konovalov, O., 47, 95
Kordi Ardakani, H., 234
Krasnitsky, U. Y., 28
Kraus, H., 18
Kravtsov, S. V., 28
Kudo, K., 92
Kuniyoshi, S., 92

Labeau, M., 6
Lahmar, A., 204
Larré, A., 204
Legrand, J. F., 95
Legrand, P. B., 220
Li, D., 100
Li, Y., 83, 100, 156
Lim, S., 63
Lin, M.-C., 247
Lipkowski, J., 69
Lisdat, F., 126
Lockhande, C. D., 137
Lu, A., 83, 100, 230

Mahmoud, S. A., 253
Mansour, B. A., 224
Markeev, A. M., 240
Medeiros, C. L., 115
Möbius, D., 78
Montecchi, M., 184
Moritz, W., 126

Nalivaiko, O. Y., 28
Napier, A., 166
Nevolin, V. N., 240
Nguyen, P., 41
Noel, J. J., 69
Nolte, R. J. M., 110

Oganyan, R. A., 145
Ojo, I. A., 57
Oostergetel, G. T., 110
Osuntola, O. K., 57

Patil, P. S., 137
Peng, X., 106
Perio, A., 1
Piegari, A., 184
Polato, P., 184
Prokopenko, V. B., 240

Renault, A., 47, 95
Rolfe, S. J., 140
Ryu, J. H., 63

Schick, G. A., 86
Schouten, A. J., 110
Schultz, O., 47
Senateur, J. P., 6
Serra, O. A., 115
Shen, J., 102, 106
Shen, Y.-C., 36
Sluch, M. I., 230
Sun, D., 32
Sun, R., 83, 100
Sun, Z., 86

Tanaka, K., 92
Teerenstra, M. N., 110
Teng, E., 41
Towe, E., 32
Trignan-Piot, L., 12
Turtsevich, A. S., 28

Uplane, M. D., 137

Vitukhnovsky, A. G., 230
Volodin, V. A., 212
Vrublevski, A. R., 240

Wager, J. F., 63
Wang, J., 102
Wang, T.-C., 149
Wautelet, M., 220
Wei, Y., 36
Wolfe, J., 163

Xian, H., 193
Xiao, Y., 118

Yamauchi, H., 156
Yao, Z., 118
Youdelis, W. V., 156

Zaitsev, S. Yu., 78
Zaniquelli, M. E. D., 115
Zavada, J., 78
Zhang, L., 83
Zhang, R., 102
Zhang, S.-Y., 36
Zhang, X., 100, 102
Zheng, J., 100
Zhu, R., 36

Subject Index of Volume 248

Adhesion
  adhesion studies of sputtered aluminium films on XC 70 steel substrates. Effect of the application of a bias voltage on the substrate during deposition, 204
Adsorption
  control of molecular adsorption by a bias-voltage applied Langmuir–Blodgett technique, 92
Aluminium
  adhesion studies of sputtered aluminium films on XC 70 steel substrates. Effect of the application of a bias voltage on the substrate during deposition, 204
Aluminium
  optical properties of sputter-deposited aluminum nitride films on silicon, 220
Amorphization
  crystallization of solid-state amorphized Al–Pt thin films, 257
Amorphous materials
  columnar microstructure of amorphous cadmium arsenide thin films, 178
  derivation of the current–voltage characteristics in filamentary conductors as a function of the distribution of filament cross-sectional areas, 263
  electrodeposition of NiP amorphous alloys. A multilayer structure, 51
Annealing
  electrical properties of sulfur-passivated and rapidly thermally annealed GaAs metal–oxide–semiconductor structures with the oxide layer grown anodically, 199
Anodic oxidation
  electrical properties of sulfur-passivated and rapidly thermally annealed GaAs metal–oxide–semiconductor structures with the oxide layer grown anodically, 199
Antimony
  preparation and properties of sprayed antimony trisulphide films, 137
Atomic force microscopy
  role of surface properties in the mechanical performance of thin film rigid disks, 41
Auger electron spectroscopy
  synthesis of Pd-doped SnO_2 films on silicon and interaction with ethanol and CO, 6

Band structure
  optical and structural properties of $CuGaSe_2$ polycrystalline thin films, 224
Barium
  electrical properties of amorphous barium titanate films prepared by low power r.f. sputtering, 247
Boron
  characterization of boron-doped diamond films using (CH_4–CO_2) gas mixtures with $B(OCH_3)_3$ as a dopant source by MPCVD, 149

Cadmium sulphide
  preparation and characterization of MOCVD thin films of cadmium sulphide, 57
Chemical vapour deposition
  characterization of boron-doped diamond films using (CH_4–CO_2) gas mixtures with $B(OCH_3)_3$ as a dopant source by MPCVD, 149
  effect of production conditions for *in situ* phosphorus-doped LPCVD polysilicon in monosilane/phosphine system on the deposition process kinetics, 28
Clusters
  polymer Langmuir–Blodgett film of organic–inorganic (Fe_2O_3) composite microgel, 106
Coatings
  characterization of TiN_xO_y thin films on architectural glass by X-ray reflection and spectrophotometry, 184
Cobalt
  deposition of cobalt disilicide thin films by laser ablation of cast targets, 145
Conductivity
  derivation of the current–voltage characteristics in filamentary conductors as a function of the distribution of filament cross-sectional areas, 263
  mixed Langmuir–Blodgett film based on tetrakis (hexadecylthio)-tetrathiafulvalene with stearic acid, 118
Crystallization
  crystallization of solid-state amorphized Al–Pt thin films, 257
  X-ray grazing incidence studies of the 2D crystallization of monolayers of 1-alcohols at the air–water interface, 95

Deposition process
  columnar microstructure of amorphous cadmium arsenide thin films, 178
  effect of production conditions for *in situ* phosphorus-doped LPCVD polysilicon in monosilane/phosphine system on the deposition process kinetics, 28
  electrical and optical properties of *in situ* "hydrogen-reduced" titanium dioxide thin films deposited by pulsed excimer laser ablation, 234
  enhancement of reactive sputtering rate of TiO_2 using a planar and dual rotable cylindrical magnetrons, 163
  preparation and characterization of MOCVD thin films of cadmium sulphide, 57
  variables affecting crystal structure, composition and orientation of r.f. sputtered $Ba_2Si_2TiO_8$ thin films, 156
Diamond
  characterization of boron-doped diamond films using (CH_4–CO_2) gas mixtures with $B(OCH_3)_3$ as a dopant source by MPCVD, 149
Dielectric properties
  electrical properties of amorphous barium titanate films prepared by low power r.f. sputtering, 247
Diffusion
  investigation of polymer membranes for diffusion restriction in miniaturised reference sensors, 126

Electrical properties and measurements
  derivation of the current–voltage characteristics in filamentary conductors as a function of the distribution of filament cross-sectional areas, 263
  effect of some spray pyrolysis parameters on electrical and optical properties of ZnS films, 253
  electrical and optical properties of *in situ* "hydrogen-reduced" titanium dioxide thin films deposited by pulsed excimer laser ablation, 234
  electrical properties of amorphous barium titanate films prepared by low power r.f. sputtering, 247

preparation and properties of sprayed antimony trisulphide films, 137
Electrochemistry
electrodeposition of NiP amorphous alloys. A multilayer structure, 51
partitioning of surfactants from the gas–solution interface onto an electrified metal–solution interface, 69
Ellipsometry
analysis of $Si/Si_xGe_{1-x}/Si$ microstructures by spectroscopic ellipsometry, 140
in situ ellipsometric control of $Si_{1-x}Ge_x/Si$ heterostructures grown by chemical beam epitaxy, 1
study of floating alcohol monolayers in contact with a resevoir drop: phase diagram and application to Langmuir–Blodgett deposition without a moveable barrier, 47
Epitaxy
growth and characterization of epitaxial vanadium films, 18
in situ ellipsometric control of $Si_{1-x}Ge_x/Si$ heterstructures grown by chemical beam epitaxy, 1
variables affecting crystal structure, composition and orientation of r.f. sputtered $Ba_2Si_2TiO_8$ thin films, 156
Europium oxide
europium-dihexadecyl phosphate Langmuir–Blodgett films, 115

Field effect
investigation of polymer membranes for diffusion restriction in miniaturised reference sensors, 126
Fluorescence
fluorescence of perylene-4-octadecanon in Langmuir–Blodgett films, 230
Fourier transform infrared spectroscopy
mixed Langmuir–Blodgett film based on tetrakis (hexadecylthio)-tetrathiafulvalene with stearic acid, 118

Gallium arsenide
electrical properties of sulfur-passivated and rapidly thermally annealed GaAs metal–oxide–semiconductor structures with the oxide layer grown anodically, 199
influence of the AlAs mole fraction on the luminescence efficiency of $GaAs/Al_xGa_{1-x}As$ quantum well structures, 32
Germanium
analysis of $Si/Si_xGe_{1-x}/Si$ microstructures by spectroscopic ellipsometry, 140
Glass
characterization of TiN_xO_y thin films on architectural glass by x-ray reflection and spectrophotometry, 184
role of surface properties in the mechanical performance of thin film rigid disks, 41
Gold
partitioning of surfactants from the gas–solution interface onto an electrified metal–solution interface, 69
Growth mechanism
columnar microstructure of amorphous cadmium arsenide thin films, 178

Halogens
FTIR characteristics of halogenated phthalocyanines exhibiting polymorphism, 166
Heterostructures
analysis of $Si/Si_xGe_{1-x}/Si$ microstructures by spectroscopic ellipsometry, 140
in situ ellipsometric control of $Si_{1-x}Ge_x/Si$ heterstructures grown by chemical beam epitaxy, 1

Infrared spectroscopy
FTIR characteristics of halogenated phthalocyanines exhibiting polymorphism, 166
Insulators
alternating-current thin-film electroluminescent devices with multiple dielectric layers, 63
derivation of the current–voltage characteristics in filamentary conductors as a function of the distribution of filament cross-sectional areas, 263
Ion bombardment
pulsed laser deposition of MoS_x films in a buffer gas atmosphere, 240
Ion implantation
mechanical stress relaxation in ion-implanted SOS structures, 212
Iron oxide
polymer Langmuir–Blodgett film of organic–inorganic (Fe_2O_3) composite microgel, 106

Langmuir–Blodgett films
angular resonance absorption spectra of Langmuir–Blodgett films studied by the photoacoustic technique, 36
control of molecular adsorption by a bias-voltage applied Langmuir–Blodgett technique, 92
europium-dihexadecyl phosphate Langmuir–Blodgett films, 115
fluorescence of perylene-4-octadecanon in Langmuir–Blodgett films, 230
mixed Langmuir–Blodgett film based on tetrakis (hexadecylthio)-tetrathiafulvalene with stearic acid, 118
mixed mono- and multilayers of poly(isocyanide)s with non-linear optically active side chains, 110
non-linear coupling of a C_{60} Langmuir–Blodgett-film-coated waveguide, 100
partitioning of surfactants from the gas–solution interface onto an electrified metal–solution interface, 69
polymer Langmuir–Blodgett film of organic–inorganic (Fe_2O_3) composite microgel, 106
preparation and characterisation of C_{60} and C_{60}/phthalocyanine derivative alternate-layer Langmuir–Blodgett films, 83
study of a reversed-duckweed-type polymer Langmuir–Blodgett film bearing axobenzene, 102
Laser ablation
deposition of cobalt disilicide thin films by laser ablation of cast targets, 145
pulsed laser deposition of MoS_x films in a buffer gas atmosphere, 240
Luminescence
europium-dihexadecyl phosphate Langmuir–Blodgett films, 115

Metal–oxide semiconductor structures
electrical properties of sulfur-passivated and rapidly thermally annealed GaAs metal–oxide–semiconductor structures with the oxide layer grown anodically, 199
Molecular beam epitaxy
influence of the AlAs mole fraction on the luminescence efficiency of $GaAs/Al_xGa_{1-x}As$ quantum well structures, 32
Monolayers
ionic selectivity of the surface-active derivatives of crown ethers in monolayers, 78
partitioning of surfactants from the gas–solution interface onto an electrified metal–solution interface, 69
resonance Raman spectroscopy of porphyrin self-assembled monlayers on silica, 86

study of floating alcohol monolayers in contact with a reservoir drop: phase diagram and application to Langmuir–Blodgett deposition without a moveable barrier, 47
Multilayers
alternating-current thin-film electroluminescent devices with multiple dielectric layers, 63
crystallization of solid-state amorphized Al–Pt thin films, 257
fluorescence of perylene-4-octadecanon in Langmuir–Blodgett films, 230

Nanostructures
preparation and characterisation of C_{60} and C_{60}/phthalocyanine derivative alternate-layer Langmuir–Blodgett films, 83
Nickel
electrodeposition of NiP amorphous alloys. A multilayer structure, 51

Optical coatings
alternating-current thin-film electroluminescent devices with multiple dielectric layers, 63
Optical properties
angular resonance absorption spectra of Langmuir–Blodgett films studied by the photoacoustic technique, 36
characterization of TiN_xO_y thin films on architectural glass by x-ray reflection and spectrophotometry, 184
effect of some spray pyrolysis parameters on electrical and optical properties of ZnS films, 253
electrical and optical properties of *in situ* "hydrogen-reduced" titanium dioxide thin films deposited by pulsed excimer laser ablation, 234
influence of the AlAs mole fraction on the luminescence efficiency of $GaAs/Al_xGa_{1-x}As$ quantum well structures, 32
non-linear coupling of a C_{60} Langmuir–Blodgett-film-coated waveguide, 100
optical and structural properties of $CuGaSe_2$ polycrystalline thin films, 224
optical properties of sputter-deposited aluminum nitride films on silicon, 220
preparation and properties of sprayed antimony trisulphide films, 137
Optical spectroscopy
angular resonance absorption spectra of Langmuir–Blodgett films studied by the photoacoustic technique, 36
control of molecular adsorption by a bias-voltage applied Langmuir–Blodgett technique, 92
preparation and characterisation of C_{60} and C_{60}/phthalocyanine derivative alternate-layer Langmuir–Blodgett films, 83
Organic substances
FTIR characteristics of halogenated phthalocyanines exhibiting polymorphism, 166
Organometallic vapour deposition
preparation and characterization of MOCVD thin films of cadmium sulphide, 57
synthesis of Pd-doped SnO_2 films on silicon and interaction with ethanol and CO, 6

Palladium
synthesis of Pd-doped SnO_2 films on silicon and interaction with ethanol and CO, 6
Phase transition
X-ray grazing incidence studies of the 2D crystallization of monolayes of 1-alcohols at the air–water interface, 95
Phosphorus
electrodeposition of NiP amorphous alloys. A multilayer structure, 51
Photovoltage
study of a reversed-duckweed-type polymer Langmuir–Blodgett film bearing azobenzene, 102
Piezoelectric effect
variables affecting crystal structure, composition and orientation of r.f. sputtered $Ba_2Si_2TiO_8$ thin films, 156
Plasma processing and deposition
alternating-current thin-film electroluminescent devices with multiple dielectric layers, 63
microstructure of plasma-sprayed TaC coatings, 12
optical properties of sputter-deposited aluminum nitride films on silicon, 220
Polymers
investigation of polymer membranes for diffusion restriction in miniaturised reference sensors, 126
mixed mono- and multilayers of poly(isocyanide)s with non-linear optically active side chains, 110
polymer Langmuir–Blodgett film of organic–inorganic (Fe_2O_3) composite microgel, 106
study of a reversed-duckweed-type polymer Langmuir–Blodgett film bearing azobenzene, 102
Prophyrins
resonance Raman spectroscopy of porphyrin self-assembled monolayers on silica, 86
Pyrolysis
effect of some spray pyrolysis parameters on electrical and optical properties of ZnS films, 253
preparation and characterization of MOCVD thin films of cadmium sulphide, 57

Quantum effects
influence of the AlAs mole fraction on the luminescence efficiency of $GaAs/Al_xGa_{1-x}As$ quantum well structures, 32

Raman scattering
mechanical stress relaxation in ion-implanted SOS structures, 212
resonance Raman spectroscopy of porphyrin self-assembled monolayers on silica, 86
Reaction kinetics
effect of production conditions for *in situ* phosphorus-doped LPCVD polysilicon in monosilane/phosphine system on the deposited process kinetics, 28
Resistivity
effect of some spray pyrolysis parameters on electrical and optical properties of ZnS films, 253

Scanning electron microscopy
characterization of boron-doped diamond films using (CH_4–CO_2) gas mixtures with $B(OCH_3)_3$ as a dopant source by MPCVD, 149
microstructure of plasma-sprayed TaC coatings, 12
Second harmonic generation
mixed mono- and multilayers of poly(isocyanide)s with non-linear optically active side chains, 110
Secondary ion mass spectrometry
characterization of boron-doped diamond films using (CH_4–CO_2) gas mixtures with $B(OCH_3)_3$ as a dopant source by MPCVD, 149
Semiconductors
optical and structural properties of $CuGaSe_2$ polycrystalline thin films, 224

Sensors
investigation of polymer membranes for diffusion restriction in miniaturised reference sensors, 126
ionic selectivity of the surface-active derivatives of crown ethers in monolayers, 78
Silicides
deposition of cobalt disilicide thin films by laser ablation of cast targets, 145
Silicon
effect of production conditions for *in situ* phosphorus-doped LPCVD polysilicon in monosilane/phosphine system on the deposition process kinetics, 28
mechanical stress relaxation in ion-implanted SOS structures, 212
Sputtering
enhancement of reactive sputtering rate of TiO_2 using a planar and dual rotable cylindrical magnetrons, 163
optical properties of sputter-deposited aluminum nitride films on silicon, 220
quantitative analyses and crystallographic studies of ZnS:Mn thin films prepared by r.f. magnetron reactive sputtering, 193
variables affecting crystal structure, composition and orientation of r.f. sputtered $Ba_2Si_2TiO_8$ thin films, 156
Stress
mechanical stress relaxation in ion-implanted SOS structures, 212
Structural properties
FTIR characteristics of halogenated phthalocyanines exhibiting polymorphism, 166
optical and structural properties of $CuGaSe_2$ polycrystalline thin films, 224
study of floating alcohol monolayers in contact with a reservoir drop: phase diagram and application to Langmuir–Blodgett deposition without a moveable barrier, 47
X-ray grazing incidence studies of the 2D crystallization of monolayers of 1-alcohols at the air–water interface, 95
Structural properties
preparation and properties of sprayed antimony trisulphide films, 137
Sulphides
pulsed laser deposition of MoS_x films in a buffer gas atmosphere, 240
quantitative analyses and crystallographic studies of Zn:S:Mn thin films prepared by r.f. magnetron reactive sputtering, 193
Superconductivity
growth and characterization of epitaxial vanadium films, 18
Surface and interface studies
adhesion studies of sputtered aluminium films on XC 70 steel substrates. Effect of the application of a bias voltage on the substrate during deposition, 204
Surface morphology
ionic selectivity of the surface-active derivatives of crown ethers in monolayers, 78
role of surface properties in the mechanical performance of thin film rigid disks, 41
Surface potential
control of molecular adsorption by a bias-voltage applied Langmuir–Blodgett technique, 92
ionic selectivity of the surface-active derivatives of crown ethers in monolayers, 78
Surface structure
mixed Langmuir–Blodgett film based on tetrakis (hexadecylthio)-tetrathiafulvalene with stearic acid, 118
Surface tension
study of floating alcohol monolayers in contact with a reservoir drop: phase diagram and application to Langmuir–Blodgett deposition without a moveable barrier, 47

Tantalum
microstructure of plasma-sprayed TaC coatings, 12
Tin oxide
synthesis of Pd-doped SnO_2 films on silicon and interaction with ethanol and CO, 6
Titanium oxide
electrical and optical properties of *in situ* "hydrogen-reduced" titanium dioxide thin films deposited by pulsed excimer laser ablation, 234
electrical properties of amorphous barium titanate films prepared by low power r.f. sputtering, 247
enhancement of reactive sputtering rate of TiO_2 using a planar and dual rotable cylindrical magnetrons, 163
Transmission electron microscopy
columnar microstructure of amorphous cadmium arsenide thin films, 178
mixed mono- and multilayers of poly(isocyanide)s with non-linear optically active side chains, 110
Tribology
pulsed laser deposition of MoS_x films in a buffer gas atmosphere, 240
role of surface properties in the mechanical performance of thin film rigid disks, 41
Tunelling electron microscopy
microstructure of plasma-sprayed TaC coatings, 12

Vanadium
growth and characterization of epitaxial vanadium films, 18

X-ray diffraction
deposition of cobalt disilicide thin films by laser ablation of cast targets, 145
quantitative analyses and crystallographic studies of ZnS:Mn thin films prepared by r.f. magnetron reactive sputtering, 145
X-ray grazing incidence studies of the 2D crystallization of monolayers of 1-alcohols at the air–water interface, 95
X-ray photoelectron spectroscopy
adhesion studies of sputtered aluminium films on XC 70 steel substrates. Effect of the application of a bias voltage on the substrate during deposition, 204
resonance Raman spectroscopy of porphyrin self-assembled monolayers on silica, 86
X-ray total reflection analysis
characterization of TiN_xO_y thin films on architectural glass by X-ray reflection and spectrophotometry, 184